

REMARKS

Applicants have carefully considered the November 30, 2005 Office Action, and the comments that follow are presented in a bona fide effort to address all issues raised in that Action and thereby place this case in condition for allowance. Claims 1-19 are pending in this application. It is believed that this response places this case in condition for allowance. Hence, prompt favorable reconsideration of this case is solicited.

Claims 1-3, 6-16 and 18-19 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Lugo (U.S. Patent No. 6,287,252, hereinafter "Lugo"). The Office Action, at page 2, maintains that Lugo discloses each of the structural components of independent claim 1, including a plurality of circuits (col. 5, lines 1-10). The Examiner, at page 4 of the Office action, maintains the rejection of independent claims 8, 18 and 19 under § 102(b) and relies on Lugo's disclosure at col. 9, lines 15-23. Applicants respectfully traverse the Examiner's characterization of the reference.

The factual determination of lack of novelty under 35 U.S.C. § 102 requires the identical disclosure in a single reference of each element of a claimed invention, such that the identically claimed invention is placed into the possession of one having ordinary skill in the art. *Helifix Ltd. v. Blok-Lok, Ltd.*, 208 F.3d 1339, 54 USPQ2d 1299 (Fed. Cir. 2000); *Electro Medical Systems S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 32 USPQ2d 1017 (Fed. Cir. 1994). Moreover, in imposing the rejection under 35 U.S.C. § 102, the Examiner is required to specifically identify wherein an applied reference is perceived to identically disclose each feature of a claimed invention. *In re Rijckaert*, 9 F.3d 1531, 28 USPQ2d 1955 (Fed. Cir. 1993); *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984). That burden has not been discharged. Moreover, there are

significant differences between the claimed invention and device disclosed by Lugo that would preclude the factual determination that Lugo identically describes the claimed inventions within the meaning of 35 U.S.C. § 102.

Specifically, Lugo discloses a system for remotely monitoring physiological data (e.g., electrocardiogram information) obtained from sensors disposed on the patient. In Lugo, a patch 40 inductively couples over a short distance to the communications module 50. The patch 40 collects information from sensors, and the communications module 50 provides the higher power radio frequency (RF) link to the central monitoring station 60. Lugo at FIGS. 1-2 and col. 6, lines 38-47.

Applicants submit that Lugo fails to disclose or suggest the structural components of the portable electrocardiograph recited in independent claim 1. The Examiner refers to Lugo at col. 5, lines 1-10 as disclosing a “plurality of circuits”. However, Lugo fails to teach or suggest “a stacked-layered circuit board” having “a plurality of circuit boards and a ground conductor layer provided between any ones of said plurality of circuit boards” as recited in claim 1. Lugo clearly discloses a **single circuit board** 200 which comprise a plurality of signal conditioning **circuits** 212. Thus, Lugo teaches a single circuit board. Lugo fails to identically disclose or suggest a stacked-layered circuit board comprising a plurality of circuit boards. A single circuit board, as disclosed by Lugo, is not a plurality of stacked-layered circuit boards as required by claim 1. Moreover, the Examiner’s comments at page 3 of the Office action regarding the capability of Lugo’s configuration is irrelevant to the requirements of 35 U.S.C. § 102 which requires a single reference to **identically disclose every feature of the claimed invention**. For the reasons outlined above, Lugo lacks the claimed structure and the Examiner has ignored the express elements recited in the claims. It is legally erroneous to ignore any claim limitation. *Uniroyal, Inc.*

v. Rudkin-Wiley Corp., 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988). Accordingly, the rejection is not legally viable and should be withdrawn.

Moreover, independent claims 8 and 19 are free from the applied art for substantially the same reasons as independent claim 1. Independent claims 8 and 19 each describes, in pertinent part, a stacked-layered circuit board having a plurality of circuit boards and a ground conductor layer provided between any one of the plurality of circuit boards. Applicant submits that Lugo fails to disclose or suggest a stacked-layered circuit board having a plurality of circuit boards and a ground conductor layer provided between any ones of the plurality of circuit boards as recited in claims 8 and 19.

With respect to independent claim 18, Lugo fails to disclose or remotely suggest “a portable electrocardiograph integrally housing an electrocardiogram measurement device and a public network communication device” as recited in independent claim 18. Indeed, the present claimed public network communication device is patentably distinct over Lugo’s patch 40, which can only transmit over short distances. The Examiner has again failed to address this claim limitation. Accordingly, Lugo fails to identically disclose every limitation of independent claim 18. Reconsideration and withdrawal of the rejection are solicited.

Moreover, the problem addressed and solved by the present invention is directed to a method of removing some effects that are caused by radio noise generated by a radio communication device and are exerted on electrocardiogram measurement being a processing of a faint signal. For accurate electrocardiogram monitoring, in particular high-bit-rate communication is required. While a PHS (personal handy phone, 64 kbps) is described as a radio system in the embodiments of the present invention, the high-bit-rate communication means is liable to generate noise because it uses a high frequency (a GHz band). Also, the PHS

system is a high-power radio transmission device with several milliwatts of output power, in which a transmission distance can be set to 500 m or more. Thus, the PHS system is a large noise source and thus requires noise removal as described in the present invention.

In contrast, Lugo describes a bit rate at col. 6, line 35. Lugo, however, merely describes the only 8 kbps device (1/8 transfer bit rate of that in the embodiments of the present invention). Therefore, no radio noise is intrinsically generated in Lugo's device. Furthermore, Lugo describes at col. 6, line 49, a frequency band that is a very low frequency region of 175 kHz. It appears that with this low frequency, the radio noise is very low, and communication is substantially realized by electromagnetic induction rather than radio transmission. This can read from Lugo's description at col. 6, line 52, wherein a coil sized with one hundred turns is used. Also, as the acceptable separation distance of communication, a limited range such as only 10 feet is described at col. 6, lines 63 of Lugo. Based on this description, it may be understood that the output power of the transmitter of Lugo is not higher than 1 mW.

Dependent claims 4-5 and 17 stand rejected under 35 U.S.C. § 103 as being unpatentable over Lugo in view of U.S. Patent No. 6,28,441 hereinafter (Raymond). The Office Action maintains that Raymond discloses an accelerometer (col. 7, lines 54-60) and corresponding use of the acceleration data. The Examiner asserted, at page 2 of the Office action, that one skilled in the art looking to measure acceleration to obtain acceleration data would have been inclined to combine the teachings of Lugo and Raymond.

Applicant incorporates herein the arguments previously advanced in traversal of the rejection of claims 1-3, 6-16 and 18-19 under 35 U.S.C. § 102(b) predicated upon Lugo. The secondary reference to Raymond does not cure the argued deficiencies of Lugo. Thus, even if the applied references are combined as suggested by the Examiner, and Applicant does not agree

that the requisite realistic motivation has been established, the claimed invention will not result. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988). Accordingly, dependent claims 4-5 and 17 are free from the applied art.

Accordingly, it is believed that all pending claims are now in condition for allowance. Applicant therefore respectfully requests an early and favorable reconsideration and allowance of this application. If there are any outstanding issues which might be resolved by an interview or an Examiner's amendment, the Examiner is invited to call Applicant's representative at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP



Brian K. Seidleck
Registration No. 51,321

600 13th Street, N.W.
Washington, DC 20005-3096
Phone: 202.756.8000 BKS:idw
Facsimile: 202.756.8087
Date: February 23, 2006

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